San Francisco Bay Conservation and Development Commission

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June 16, 2016

TO: All Commissioners and Alternates

FROM: Lawrence J. Goldzband, Executive Director (415/352-3653; larry.goldzband@bcdc.ca.gov) Sharon Louie, Director, Administrative & Technology Services (415/352-3638; sharon.louie@bcdc.ca.gov)

SUBJECT: Approved Minutes of May 19, 2016 Commission Meeting

- **1. Call to Order.** The meeting was called to order by Chair Wasserman, at the Ferry Building, Port of San Francisco, California at 1:05 p.m.
- **2. Roll Call.** Present were: Chair Wasserman, Vice Chair Halsted and Commissioners Addiego , Bates (arrived at 1:10 p.m.), Chan (represented by Alternate Gilmore), DeLaRosa, Lucchesi (reported by Alternate Pemberton) McGrath, Nelson, Pine (departed at 3:07 p.m.), Randolph (arrived at 1:17 p.m.), Sartipi (represented by Alternate McElhinney), Sears, Spering (represented by Alternate Vasquez), Techel (departed at 3:14 p.m.), Wagenknecht (departed at 3:14 p.m.), Ziegler and Zwissler.

Chair Wasserman announced that a quorum was present.

Not present were Commissioners: Santa Clara County (Cortese), Department of Finance (Finn), Speaker of the Assembly (Gibbs), Contra Costa County (Gioia), Sonoma County (Gorin), U.S. Army Corps of Engineers (Hicks), City and County of San Francisco (Kim).

- **3. Public Comment Period.** Chair Wasserman called for public comment on subjects that were not on the agenda. There were no public speakers present to comment. Chair Wasserman moved to Approval of the Minutes.
- **4. Approval of Minutes of the May 5, 2016 Meeting.** Chair Wasserman asked for a motion and a second to adopt the minutes of May 5, 2016.

MOTION: Commissioner Wagenknecht moved approval of the Minutes, seconded by Vice Chair Halsted.

VOTE: The motion carried with a vote of 17-0-0 with Commissioners Addiego, Bates, Gilmore, Jahns, Pemberton, McGrath, Nelson, Pine, McElhinney, Sears, Vasquez, Techel, Wagenknecht, Ziegler and Zwissler, Vice Chair Halsted and Chair Wasserman voting, "YES", no "NO", votes and no abstentions.



- **5. Report of the Chair.** Chair Wasserman reported on the following:
- a. **New Business**. Does anybody have any new business to suggest that we take up in the future? (No comments were voiced)
- b. **Commissioner Randolph's visit to China.** I would like to start by requesting that Commissioner Randolph briefly report on his recent visit to China.

Commissioner Randolph addressed the Commission: I was fortunate to be invited about one month ago to an environmental conference in China in a big urban area where they are debating how to reorient China's policies from what they have been for decades. They have been about growth, growth and everything else, forget it.

Now they are paying the cost of that. They are the most polluted nation on Earth. They are trying to figure out how to rebalance their policies with appropriate incentives and punishments for their officials to show environmental results as well as economics.

Two things happened. Steve Goldbeck was kind enough to give me a thick stack of wonderful slides from BCDC that I was able to present. They focused on climate adaptation and sea level rise because nobody else was going to talk about that. In fact, in two days, nobody else talked about that. Several people came up afterwards and said, we are glad you talked about that.

It was striking that in the full two days of discussions about environmental management and improvement, this never even came up.

Recently when I was in the biggest port city in China, they took me to an island and said, "we are going to redevelop this island. We are going to put high rise buildings here and megatowers and build a financial center and we are going to have 100,000 people living here and we are going to put university facilities here. There will be billions of dollars of investment here."

The one thing that struck me was that this island is separated from the mainland by a channel maybe 50 to 100 yards wide and several miles long. It is flat as a pancake. It is about as high above the sea as this table. (Motioned hand to approximate level of table in front of him) And they are putting all this money here and at the end of the conversation I asked them, "by the way, have you considered what the effects of sea level rise and climate change will be and where the water might be here in 20 or 30 years?"

They replied, "oh no, we will take care of that." So anyway, they are trying to attract people from around the world to put in billions of dollars into this and it really did strike me that our conversations here, for all of the limitations, are very advanced. We are putting a lot of thought into this and there are places in the world where they have barely put a toe on this road.

There is a lot of expertise here that we can bring to bear for others who are going to be on that road eventually. I want to thank Steve for the great slides.

BCDC has now been presented and discussed in terms of what we are doing around climate adaptation.

c. **Commissioner Zwissler publication on Measure AA.** We are also going to give Commissioner Zwissler a moment to talk about a conversation about Measure AA.

Commissioner Zwissler addressed the Commission: You should have a printout of a conversation I had with Nate Kaufman who is the young genius behind the Project LEAP which we have talked about here on several occasions.

We are hoping to get this published somewhere as an Op-Ed piece. If you have any thoughts or friendly relationships we would like to hear from you.

This is a light-hearted approach but also pretty serious about what we are trying to accomplish with Measure AA. Thank you for your help and if you have any thoughts on this, talk to me.

d. **Bay Fill Policies Working Group Report.** Chair Wasserman continued the meeting. I would ask that Commissioner Nelson give us a brief report on the Bay Fill Policies Working Group, which met this morning.

Commissioner Nelson reported the following: We had a terrific meeting and an interesting time at this morning's meeting. We spent a chunk of this meeting first hearing a presentation from staff about the policies for a rising Bay, a project funded by NOAA. We are also looking back at the last year or so of meetings that we have been holding and planning our next steps. We are looking at our built environments as well as resource protection and our policies and regulations pertinent to these. We will continue briefings on a number of key issues. We are waiting for your guidance.

- e. **Next BCDC Meeting.** We are not going to hold a meeting on June 2nd. We will hold a meeting on June 16th here at the Ferry Building. We expect at that meeting to consider the following matters:
 - (1) A public hearing and vote on the proposed Design Tech High School at the Oracle Campus in Redwood City.
 - (2) A public hearing and vote on an amendment to a permit for a residential development in Alameda.
 - (3) A public hearing and vote on extending the agreement that allows houseboats and live-aboards at Galilee Harbor in Sausalito.
 - (4) We expect to have a staff briefing on the Policies for a Rising Bay Project.
 - (5) A staff briefing on adaptation planning for Highway 37.
 - (6) A staff briefing on the ART Program Mapping and Analysis status.
- f. **Ex-Parte Communications.** Are there any ex-parte communications that any Commissioner wishes to put on the record? (No comments were voiced) Chair Wasserman moved on to the Executive Director's Report.
- **6. Report of the Executive Director.** Executive Director Goldzband reported: The confluence of our three public workshops, which had great attendance, and the current Presidential election whose outcome will be decided by those who decide that it is in their

interest to vote – has reminded me of Woody Allen's famous analysis that "80% of life is showing up." I am very happy that we have a very full house today, both full of Commissioners and Alternates and members of the public. Now that we've shown up, I look forward to a great discussion.

We do have some absolutely fantastic news to share. Included in Governor Brown's budget revision presented to the Legislature last Friday is \$350,000 for BCDC in order to move from our current location in the Hiram Johnson State Office Building to the new Regional Headquarters at 375 Beale Street. (Applause) We hope to move into that building – alongside MTC, ABAG, and the Air District – in autumn of this year. Steve Goldbeck was up in Sacramento yesterday to watch the Senate and Assembly Budget Committees approve a revised budget that includes the provision, so we now can start our planning. I would like to request that the Commission publicly thank the Department of Finance for its willingness to analyze our request despite its somewhat out of the ordinary nature. As such, staff will bring to the Commission that request formally after what we hope is a very benign budget process this June.

Some staffing news to share with you as well; with us today is our new Records Manager, Christine Nutile. There she is behind us. (Ms. Nutile stood and was recognized) I am pleased that she is now in her fourth day at BCDC and that she did not run out of our office screaming when she saw our 50-year-old card catalogue of permits that is stored in recipe boxes.

Also, we are pleased to be joined by a new legal intern for the summer, Kristoffer Jacob. Kris, who goes by the name of "Jacob," is a third year student at the UC Berkeley School of Law where he is Executive Editor of the prestigious Ecology Law Quarterly. Jacob also earned his undergraduate degree from UC Berkeley as a Business major, so he is a true Golden Bear through and through.

Some sad news – you will remember that Maggie Wenger of our planning staff has tirelessly worked with you on the ART Program, our public workshops, and has developed quite an expertise regarding park sustainability. Unfortunately, she will leave BCDC on Friday to take a new job with the City and County of San Francisco. Our loss is both of our gain, as we have another friend in City Hall. (Ms. Wenger stood and was recognized)

Finally, last week I had the pleasure to sit with Amy Hutsell of the Coastal Conservancy, David Lewis of Save the Bay and a member of the staff of the Regional Water Quality Board down at the Santa Clara Valley Water District to talk about the Ora Loma Horizontal Levee Project. There was a real good staff discussion beforehand about the project and then a panel on which I sat which had some very good questions thrown at us by Norma Camacho of the Water District. My role was to assure the people present that BCDC is not unalterably opposed to fill; that, indeed, the next 50 years might well look different than the previous 50 years and that BCDC staff does not wear horns. I think I was successful in doing so and I look forward to having further discussions about how BCDC will ensure that the Bay Area is resilient in all forms.

That completes my report Mr. Chair and I am happy to take any questions.

Chair Wasserman asked: Any questions for the Executive Director? (No questions were voiced) Chair Wasserman moved on to Item 7.

- **7.** Consideration of Administrative Matters. Chair Wasserman stated: Brad McCrea is here if Commissioners have any questions about the administrative listing that was distributed on May 13th. (No comments were voiced) Chair Wasserman moved on to Item 8.
- **8.** Role Changes on the Design Review Board. Chair Wasserman announced: Item 8 regards some changes that we are proposing for the Design Review Board and Ellen Miramontes will make the staff presentation.

Bay Development Design Analyst Ellen Miramontes presented the following: One of my roles is to serve as Secretary for the Commission's Design Review Board, commonly known as the DRB. I want to let you know of some changes to makeup of the DRB. The Design Review Board's longtime Chair, John Kriken, has informed us of his desire to step down as Chair. Mr. Kriken has served on the Board since August 1, 1985, 31 years. He has been Chair since 1995. We are extremely grateful for his many years of volunteer service to the Commission. Thankfully, Mr. Kriken wants to continue his participation as an Alternate Member of the Board. Given Mr. Kriken's change in roles, it is a natural time of transition. Staff is proposing that two additional long-serving Board members, Steve Thompson our current Vice Chair and Ephraim Hirsch, also move to alternate positions.

Like Mr. Kriken, Mr. Thompson has served on the Board since August 1, 1985, 31 years. He has served as the Vice Chair for many years. And, like Mr. Kriken, he is also an architect. Mr. Hirsch, who is a structural engineer, has served on the Board since 1991, 25 years.

We are extremely grateful for their decades of volunteer service to the Commission. Their insightful guidance has led the Commission to approve tremendously enhanced public access along the San Francisco Bay shoreline.

The McAteer-Petris Act provides that the Commission Chair appoints the Chair, Vice Chair and Members of the DRB in collaboration with and subject to the concurrence of the Commission. With these role changes, staff recommends that the roles of the existing Board Members and Alternates also be changed.

Staff recommends that the Chair move three current Alternates, Tom Leader, Stefan Pellegrini, and Gary Strang, to become full Members and further recommends that Karen Alschuler serve as Chair and Gary Strang serve as Vice Chair. In addition, staff recommends that the Commission concur with the Chair's appointments and present Resolutions of Appreciation to Mr. Kriken, Mr. Thompson and Mr. Hirsch.

Thank you very much for your consideration of this request.

Chair Wasserman continued the meeting: We have no public speakers. Do any of the Commissioners have questions?

I would like to start by thanking the DRB Chair Kriken, Vice Chair Thompson and DRB member Hirsch for all that they have contributed to BCDC over these long years and to the Bay and to the public's enjoyment of the Bay. They did not do it for the money or the glory.

They have made a great difference to our shoreline making it much better and more beautiful with their efforts. I am glad after all these years that they are not depriving us of their experience and will continue to serve as Alternates, available to help us in the decisions that we will have which could even be more difficult than the ones you have faced in the past.

I would ask Mr. Hirsch if he would like to make any remarks as the one representative of the transitioning members.

Mr. Hirsch addressed the Commission: I appreciate very much the honor you are bestowing on all three of us. It has been a great honor and pleasure to have served for a quarter of a century. Time does fly rather rapidly. (Laughter)

It has been a lot of fun, a lot of contention sometimes. I hope that we have contributed in some small way.

One of the more serendipitous happenings as a Member of the DRB was to become a Member of the Engineering Design Advisory Panel that helped choose the design of the new Bay Bridge. I know that was contentious, and perhaps continues to be, but I am very proud to have served in that role and also to have strongly urged the adoption of the design that we have.

I hope to be able to serve as an Alternate and, when called upon, I will be happy to do so. Again, it has been a pleasure and I look forward to many more years either in this capacity or others to serve the Bay and the City and the region. Thank you very much. (Applause)

Chair Wasserman added: Thank you very much.

Vice Chair Halsted voiced her appreciation: I would just like to add my appreciation and admiration I have for these three people who have contributed so much. I don't think most of us have any idea of how they have raised the level of vision, discussion and actual results in the access around the Bay in many of the projects that we get to review for different purposes. They have really changed the quality of the access that we have provided around the Bay. I thank you from the bottom of my heart for what you have done. I do so appreciate it and I really appreciate your continuing on to offer advice to us and I would like to extend those remarks to the two who are not here and also congratulate the proposed new Chair, Vice Chair and other Members. Thank you very much.

Commissioner Nelson spoke: I have not been to a DRB meeting in 20 years. But it turns out that all three of these members were at the last meeting I attended. (Laughter) What I remember in particular is that DRB meetings were always very interesting because they were not a traditional regulatory discussion.

They were a discussion between extremely experienced architects, engineers, project designers and applicants and they were a seminar in which projects got better. When you look around the Bay shoreline in the last 25 to 30 years, the Bay Area can be enormously proud of the progress that we have made in making the Bay shoreline accessible, useful and beautiful. These three members deserve an enormous amount of credit for that transformation.

Chair Wasserman added: One of the interesting things that happen is, that most of the projects that go before the DRB are projects that some locality has approved. That design process in the locality tends to look at the part of the building that faces the City. Our DRB performs the very important role of looking at the overall building and structure issues; also but the part that faces our Bay that all of us enjoy. We thank you very, very much for your service.

With that I would appreciate a motion.

MOTION: Vice Chair Halsted moved approval of the staff recommendation, seconded by Commissioner Nelson.

Chair Wasserman added: This is both for confirming the change that we have proposed as well as thanking the members who are transitioning for their service and the resolutions that we have prepared.

VOTE: The motion carried with a vote of 18-0-0 with Commissioners Addiego, Bates, Gilmore, Jahns, Pemberton, McGrath, Nelson, Pine, Randolph, McElhinney, Sears, Vasquez, Techel, Wagenknecht, Ziegler and Zwissler, Vice Chair Halsted and Chair Wasserman voting, "YES", no "NO", votes and no abstentions.

Chair Wasserman continued: It is my pleasure to present the actual resolution to Mr. Hirsch who is here. Chair Wasserman presented the Certificate of Resolution to Mr. Hirsch. (Applause)

9. Discussion and Possible Votes Regarding Rising Sea Level Policy Options Chair Wasserman announced: Item 9 is a workshop. It is the fourth workshop that we have held on adapting to rising sea levels. I am going to set a little context for our discussion. This workshop, unlike our others, is going to be an active discussion amongst Commissioners and Alternates.

I think there are four critical and accurate assumptions that underlie and came out of our three previous workshops on this subject.

The first is, the sea level in our Bay will rise over the next 50 to 100 years. We do not know how high it will rise. We do not know how soon it will rise. We do know that it will rise to a level much higher than we are now prepared to deal with.

Two, there are many institutions that are looking at and working on pieces of this challenge. There is no clear central leadership addressing how we are going to adapt and save our natural and built environment from rising sea levels.

Three, the methods to protect our shoreline and our natural and built environment will differ. Hardscape in some places, softscape in some places and in a few places probably no solution to save it. The solutions in one place must be evaluated not only in their own cost and benefit analysis but also in their effect on the lands around them. No piece of property is an island.

Four, we must address this at a local and a regional level, at a regional and a local level.

Some may ask why BCDC is taking the lead in this issue in promoting Bay Area resilience to rising sea level. In one sense the answer is very simple, I would summarize it by paraphrasing Rabbi Hillel – If not us, then who? If not now, when? More than any other public agency BCDC consists of local, regional, state and federal representatives who analyze, decide and resolve Bay-related, regulatory and planning challenges. Our jurisdiction and authority is unlike any other.

We are leading the development of a chapter on resilience for the upcoming 2017 Plan Bay Area, Plan Bay Area 2.0 as it fondly named. Our planning and regulatory divisions have gained unparalleled experience in analyzing and responding to fill this need and no one else has stepped up in as comprehensive a manner as BCDC.

With that context there are also four situations that have led to and inform our discussion today.

First, we do know more about sea level now than when we adopted the amendment to the Bay Plan to address climate change in 2011. And the information arrives about rising sea level and its ramifications daily.

While there is still uncertainty, and there will continue to be uncertainty, we know that rising sea levels will happen more quickly than we thought five years ago and almost certainly be higher than we thought five years ago.

We do not expect to use recent unofficial projections about the rate of rising sea level, which have been projected at possibly nine feet by 2100.

We know that scientifically conservative projections that we have used are based upon guidance from the state of California but they may soon be out of date.

We need to speed up our response to rising tides now. We need to integrate them as much as possible into the new scientific evidence as it reaches us. We need to assure that the data that we get is as transparent and accessible to all as possible. We need to do this quicker.

The recommendations before us today address these challenges.

Second, our implementation of the Bay Plan amendments have neither caused the world to end for local governments, development interests or environmental advocates nor have they resolved many of the issues that continue to face us. During our public workshops and our Commission meetings we have learned about our regulation shortcomings and some successes and possible ways to make them more effective.

The recommendations we consider today begin to address in a more specific way those challenges.

Third, I am proud that our Commission does continue to take their responsibilities very seriously and our staff continues to lead the Bay Area in working collaboratively with public, private and community-based organizations to further the cause of Bay Area resilience.

Our two Commissioner working groups thus far on rising sea levels and on Bay fill, our formal and informal discussions, our workshops, the conversations you have held with each other and with your constituents are too numerous to list. Projects that have come before the Commission for consideration have spurred serious deliberations and questions about how we should interpret our laws and policies and how we should be preparing to adapt to rising sea level.

There is still no central leadership to these efforts. We need to accomplish that if we are going to achieve progress and we are going to be ready by the time that ocean is one, three, six or nine feet higher. We must continue to inspire stronger relationships among and between local and regional planners and convince state and federal policy makers to take on more active roles in the adaptation process; roles that are similar to those that they have taken on in fighting greenhouse gases.

Our recommendations that are before us today address these challenges.

And the fourth circumstance that should inform our discussion is that the public sector must take the lead in these efforts. We certainly are reaching out to and will continue to reach out and need to bring to the table, bring to the discussions and inspire the private sector but in terms of leadership, they are not there yet.

We are not as successful as I would like to see us because too few private companies really attended our workshops. We are going to continue to work on that and some of the recommendations we are going to address later, address those as well.

We have reviewed the recommendations that are before you with several Commissioners, specifically Commissioners Pine, Zwissler and Gioia and some of their staff and helped to formulate the actions we are considering today.

We distributed them over a week ago to the public, to all Commissioners and to the workshop participants. On Monday of this week I convened a group of leaders from the public and non-profit sectors who care deeply about resilience including representatives from SPUR, SFEI, MTC, ABAG and BARC among others to learn about their thoughts and reactions to the recommendations we are reviewing. Their comments were overwhelmingly positive but also helped shape some of the comments you will hear today from staff and others.

Let me finish by saying that I am very much looking forward to hearing your thoughts. I mean that. I hope at the end that we can entertain a motion to adopt the recommendations and actions with whatever amendments we may choose to put forth and ask staff to return to us with plans to implement these as quickly as possible.

I do want to make very clear that nothing we are proposing today, no action we are taking today is intended to or will change BCDC's regulations or processes based on the actions we take today. They may well lead to changes in the future when the refinements come back to us and we take our subsequent actions. If we don't start giving very specific guidance now, we are not going to survive the inundation.

With that I would ask Lindy Lowe to give a short staff presentation on the recommendations and then open it up to discussion.

Senior Planner Lindy Lowe presented the following: I am going to summarize the Commission workshops that we have had over the last four months and then transition into the actions that we proposed in the staff report.

The Commission has held three workshops to date. The first workshop was the five year review of our climate policies and that was in January. The second workshop focused on regional resilience, not just the work that BCDC has been doing in the region but, also the regional work that other agencies have led and supported. That was in March.

The third workshop we focused on regional actions, "what are the actions that the region could take or the actions that need to be taken at the regional scale to address the issue of rising sea level?"

Now here today we are at the fourth workshop where we are presenting some of those actions to you for your consideration.

The objectives for the workshop series are as follows: bring issues identified by the Rising Sea Level and Bay Fill Commissioner Working Groups, the policies for the Rising Bay Project and the Adapting to Rising Tides Program to the full Commission and a broader range of participants and allow participation in those projects in a different way; having the Commissioners sit at tables with the other participants and really work through some of the issues that have come out of all of those efforts.

Assist the Commission in determining the direction BCDC and the region should take to address rising sea levels and bring new levels of coordination and collaboration; and have the discussion with a broader audience in the room.

At this workshop we want to create a robust discussion among Commissioners and Alternates that considers the input that we received at the first three workshops. We want to select a number of recommendations to implement, further analyze and develop and refine and clarify the recommendations.

The first workshop recap; again, it was about the climate policies and what we found in the input that we received were four primary themes.

First, there is an issue about BCDC's jurisdiction and authority that results in a project-by-project approach that limits BCDC's ability to address sea level rise.

Second, the balance of risk, innovation and adaptive management, third the regional approach to resilience and fourth the need to look at this beyond the project-by-project scale were the other themes.

The second workshop focused on regional resilience and the workshop resulted in the identification and recommendation of possible regional actions. Recommendations regarding the implementation of those actions, who should lead those actions, who might support those actions, questions and issues raised about governance, stakeholder and public engagement, funding and the tension between guidance and requirements or the carrots and sticks. Will this happen if we guide people to it or are there some things that we have to regulate or enforce?

The third workshop was on regional actions. We had a regional action open house. We wanted to be as comprehensive as possible because we do want to know what the Commissioners and the participants in these workshops really value. And if we left something out it may be that it did not get votes because it was not on the wall.

We had you 'sticker vote' and it wound up working out better than I expected. (Laughter) Hopefully, everybody was pleasantly surprised of how that turned out.

And then we had small group discussions which were really rich discussions where a lot of great information came out and helped to refine the actions that we were looking at.

We came out of the third workshop with seven actions that obtained the most votes.

This is the Commission's opportunity to consider these actions, revise and discuss them today.

The one that received the most votes was the Regional Sea Level Rise Adaptation Plan. The second vote getter was consistent vulnerability assessments for all nine counties. The third was new institutional arrangements. The fourth was to identify and facilitate the prioritization of physical interventions. The fifth was the regional data repository to collect and share data to guide sea level rise strategies and actions. The sixth was to develop a regional regulatory system to discourage new development that is not resilient. The seventh was to change existing regulations.

The workshop four considered recommendations based on the input from all three workshops not just the third one. We then took the information that we have been collecting in the Adapting to Rising Tides Program, the Policies for A Rising Bay Project and the two Commissioner working groups, Rising Sea Levels and Bay Fill; we have met with representatives from a variety of agencies, organizations and perspectives.

Then we considered which actions were most appropriate for the Commission to lead and which actions were necessary to move the region forward.

So there may be a few actions which you think might not be the most appropriate for us to lead but that the Commission should absolutely support and were not included in today's recommendations. The staff recommendation focuses on those actions that made the most sense for the Commission to have a strong leadership role in.

The five workshop four recommendations are: the Regional Adaptation Plan, consistent county-scale assessments, new institutional arrangements, prioritize physical interventions and change existing laws and policies.

There is a structure that may evolve in terms of our conversations today. We want to have time to talk about each one of these actions and to capture your ideas and thoughts about each one of these actions.

I will walk through one slide at a time and allow you to have that discussion. The first slide is on the Regional Adaptation Plan and the discussion time is estimated at 30 minutes.

Chair Wasserman asked: Any questions to start with? (No questions were voiced) I would note that we do have people taking notes because if there are comments that we want to put into the program to adopt, we want to make sure that we have those as clearly as possible. (Two staff people were recording comments on easels at opposite ends of the room)

Executive Director Goldzband added: In addition, Gabe and I are also taking copious notes so that when a motion is actually made we will do our best to ensure that we get the exact wording down.

Chair Wasserman continued: We do have some public speakers and we will take those first. I would also note that we have three letters in our packet on this subject, one from BIA, one from Bay Area Council and one from the San Francisco Airport, all of which support our efforts. Some of them do raise some specific issues.

Mr. Arthur Feinstein of the Sierra Club spoke before the Commission: I am speaking for the Sierra Club and the Citizens Committee to Complete the Refuge. I was one of the participants in all three of those workshops, which I thought were really great.

Several people from my persuasion, the environmental community, felt that occasionally the resources of the Bay were viewed, especially tidal wetlands, as tools to address sea level rise rather than recognizing their innate importance and value.

Every now and then this got lost and mostly the conversations were, well, how can wetlands work for us rather than, how can we work to make sure we have wetlands. We need a little reversal there.

In terms of what you will be discussing today the sixth or seventh of the regional actions discussed at the third workshop was the regulatory system for protecting undeveloped low-lying lands. While that may be subsumed under some of the other categories, we do feel that you need to look at it.

We have a lot of low-lying lands around the Bay Area that are going to be inundated in 20, 50, 75 or 100 years. Somebody needs to be saying, no, not a good idea to develop in these areas. There are several reasons for this.

One is the huge costs once they have figured out that they will have to do something about the fact that they will be underwater and creating levees is very expensive and not failsafe.

Secondly, as the Bay rises tidal marshes are going to be inundated. We are going to start losing tidal marshes. Marshes are going to need to move inland because they are going to need a little higher land.

And that is the kind of lands that I am talking about now, undeveloped lands that can provide a place for wetlands to move to as the sea level rises. A Bay without wetlands is going to be a sterile Bay.

We do think that it is important that you consider in the future some kind of regulatory system that says, "do not build at these locations." BCDC permits now. You deny projects now. It is not a huge leap to incorporate this into the discussion and seriously think about this need.

Ms. Kathy Schaefer was recognized: I am the Chair of an ad hoc group called CHARG. I want to thank you for your leadership and the terrific work your staff has done in bringing together a diverse group of people.

As Chair Wasserman noted, there is no one entity looking at how we will adapt. Several years ago there was an ad hoc group that formed from Alameda County flood district, Santa Clara Valley Water District and FEMA. They came together as CHARG. This stands for Coastal Hazard Adaptation Resiliency Group. We continue to have strong participation by federal, state and local entities as we try to wrestle with these issues.

The CHARG group is focused on the implementers, the folks that have to move, elevate, abandon or do something. We are focused on serving the needs of that group. To that end, as you contemplate the role of BCDC I would like to say that we have formed three working groups that are looking at some of the technical issues.

We have a working group looking at the science of climate change and what everyone is doing, how they are incorporating it into their plans.

We have a group looking at adaptation strategies and another group that is looking at the groundwater implications.

We have a policy group and a funding working group. They are all very ad hoc and amazingly well supported by a diverse group of people.

I am here today to thank you for your leadership and to ask as you examine the role of BCDC to think about CHARG and how CHARG fits in that picture and what role you think CHARG should fill and how we can be a part and work collaboratively.

Chair Wasserman recognized Mr. Warner Chabot: I am the Executive Director of the San Francisco Estuary Institute. We are a non-advocacy, non-profit, science think tank. We focus on science issues related to Bay Area water, climate and land use issues. We partner with BCDC and many other local organizations and government institutions and agencies over the last two and a half decades. We focus on Bay Area, shoreline, aquatic and other issues.

I want to applaud the staff on their excellent recommendations, the presentation today and the three workshops that preceded and produced them.

I will conclude my remarks with one additional suggestion to add to the five recommendations that are made here. The local impacts of climate change, extreme weather and sea level rise are dramatic and accelerating. These impacts have also dramatically increased over the past couple of years the dialogue and collaboration among government, business and NGOs at all levels on how to tackle these challenges.

A lot of the participants are trying to figure out how we can best work together in a large bathtub that has 101 local governments and 40 or so of them on the edge of the Bay.

There has been a lot of constructive discussion on the science, governance and financial aspects of the issue. Three things become very clear.

One is that BCDC is an essential player to address the challenge and that you are clearly stepping up to the plate. Two, we need to accelerate the collaborative planning among local, state and federal resource managers, private sector and NGOs. And three, this complex planning challenge is going to require compiling, maintaining and providing the best available environmental and scientific data to assess, plan and evaluate our solutions.

At your last workshop the stakeholders were asked to prioritize BCDC's sea level rise actions. One very highly ranked action was, and I quote, identify and fund a regional repository to collect and share data to guide sea level rise strategies and actions.

I would urge you to add this action to the five that you are proposing to adopt today. Good science and data is essential to sea level rise planning.

This type of repository can include everything from aerial imagery, sediment management, water supply and aquatic resources, flood infrastructure mapping, shoreline structure mapping and various forms of modelling, monitoring and analysis; a repository of technical data is essential to help BCDC and its local partners plan in an accurate and cost-effective manner.

The Bay Area already has several repository models that support regional environmental planning and management. BCDC is going to set the priorities. Those priorities should acknowledge the need to identify and support a system to compile, maintain and provide the scientific and technical data that regional planners are going to depend upon.

The points that the stakeholders made do justify your consideration of them as part of an essential element. Thank you.

Chair Wasserman continued: I want to go through the items one by one. They are in an order based in part on the voting that came out of the last workshop and in part in the order of importance of the focus. They are related to one another. We want to acknowledge that one and two are very closely related.

Ms. Lindy Lowe commented: The first one that we are going to discuss is the Regional Adaptation Plan. We provided a couple of bullets under each one of these actions to give people ideas of the kinds of things to talk about.

For this one we have: develop a plan led by BCDC with prioritized actions using a similar approach as the Regional Transportation Plan. This gets back to the need for local and regional interaction and then regional and local interaction. That is a planning process that does that fairly well or as well as any process does.

Form and lead a regional working group to guide, plan development and implementation. This is absolutely necessary and we have learned this in the Adapting to Rising Tides Program, and in the effort in southern Marin that Commissioner Sears led, that you need a diverse group of working group members that understand the assets and the issues and the community perspectives in order to do this work.

Start a new Commissioner working group on innovative funding and create a real-time dashboard that depicts regional progress towards resilience.

We estimated the amount of time for this to be approximately 30 minutes. We will be keeping track of the time.

Chair Wasserman asked for comment from the Commissioners: Does somebody want to start? Thank you Commissioner Nelson.

Commissioner Nelson commented: I have a question. Warner Chabot had a comment about data that does not obviously fall under the outline here. I have a suggestion here. I will bring this up later.

A comment and a suggestion. First is, I was pleased to hear Arthur's comments and read the comments from the Bay Area Council and the San Francisco Airport, both of them have recommendations about adaptation planning and the regulatory process. Some of those will fit in Item 5 which is about changing existing regulations but there is also a home for that discussion in this item about regional adaptation planning where obviously we need to have that discussion about where we raise, where we retreat, where we develop green infrastructure. I think that is the best place to have that conversation.

I am a little concerned that the existing language that talks about a BCDC-led effort which I completely support could be misinterpreted by some as a top-down BCDC led effort and I would make a motion that we should add the words, "collaborative" and "inclusive" in this language here.

Chairman, are we also going to act on the overarching bullets listed on the front of our staff report?

Chair Wasserman replied: We can do whatever the Commission desires to do.

Commissioner Nelson suggested the following: I would suggest after, Develop A, we simply add, develop a collaborative and inclusive.

Executive Director Golzband added: I should note that what we are actually going to work from the language in the packets in front of you and to work off of those.

Chair Wasserman had a suggestion: This is a process suggestion. I do not think we should get into terribly careful wordsmithing this afternoon because it will take us too long. The points you make clearly indicating that the efforts need to be collaborative and inclusive are absolutely right and we should make sure that it is there.

There may be some specifics; the scientific data base piece might be one, where we are going to have to do some specific wording because it is not here.

I do not want us to get bogged down too much in discussions over exact wording.

Commissioner Zwissler asked for clarification: Could I get clarification of what a RAP is, a regional adaptation plan as compared to a regional transportation plan? What is the outcome of this bullet?

Chair Wasserman replied: The reason it is useful to think about the Regional Transportation Plan as a guide is it really is a process in which cities and counties develop their transportation thoughts, needs and projects. Most of the people around the table are familiar with that.

That goes to the region, to MTC. In that model it then goes to the state to become part of the State Transportation Plan and then it goes to the federal government where the money comes from and becomes part of the federal program and that gets divided up amongst agencies.

It then comes back down with a regional plan that incorporates all of those. That then gets redone and goes back out down to the localities where they, again, look at what has been done, what has not been done, what connections need to be made. It is a repetitive, iterative process.

One, it is that iterative process that is critical to this Regional Adaptation Plan. The second piece of that is, I do think it is going to be very necessary that this plan come to existence, implementation and fruition and it would be a set of steps around the region. Most importantly, it will be addressing the interactions between and across jurisdictions that will be absolutely necessary if we are going to make sense of this adaptation process.

You would have an actual written plan with specific projects in it. It would have some goals. It would have some criteria. It would have some timelines. One of the other elements is that the RTP is, by federal edict, a financially constrained plan. It is not a plan of; throw everything in it you want.

We do not have a funding source or sources yet. We need to have some elements of financially constraints, so have some criteria that will evolve over time of financial feasibility for these various projects as well as some push hard as realistic cost estimates as we can make.

Vice Chair Halsted commented: My comment really parallels Commissioner Zwissler's. It would be smart if we could articulate what we mean by this in our description of this rather than just referring to the Regional Transportation Plan because many people who need to know about this might not understand that.

I think the process is critical. The only piece that I worry about a bit is that coming from the local to the regional to the state, that we be sure that BCDC looks at the regional carefully and set some standards for that before integrating it.

Chair Wasserman agreed: Yes. We will absolutely look at it in a regional way.

Vice Chair Halsted added: So many of our regional things tend to be compilations of localities that are not integrated. We really cannot afford that.

Chair Wasserman repeated a point: So integration is a critical word here.

Commissioner Sears commented: I am having a little bit of a chicken-and-egg problem. Item one and item two are necessarily connected. I would look at doing a regional adaptation plan as the ultimate goal. I think having it be an iterative process is crucial.

I would hate to see anyone starting to prioritize adaptation actions until they actually had a county-scale sea level rise vulnerability assessment because it is the cart before the horse.

I am wondering if the conversation may need to be a little different if there is consensus that what we are aiming for is a regional adaptation plan. The conversation then should be; what are the steps that we need to do to make sure that we are creating the kind of plan that is actually effective.

So maybe it is tiered a little bit differently than saying, priority one is regional adaptation plan and second we are going to talk about a sea level rise vulnerability assessment.

Chair Wasserman responded: We have gone around and around on that issue. It is an important one. I am not sure that there is a right answer.

One of the reasons I favored point one being first is that there is no way we are going to get to one without doing what we are talking about in two. If we focus on two as the starting point it is too easy to lose the thought that, we are building these pieces that will be knit together.

Commissioner Sears replied: Understood. But they are inextricably linked. I want to make sure that we do not lose track of that.

Commissioner Ziegler commented on the concept of a dashboard: One comment on the point about data is the potential hook is this last bullet here about the dashboard. I have talked much about dashboard concepts where you can see the different indicators. Those should all be based on the data behind that. I really like thinking about data from the user's point of view of how you see information.

One suggestion is that the dashboard point may be a way to link in because unless you have the data behind it you are not going to be effective.

I was wondering how the planning process might be funded; also, what funding? The robustness of what it might be, the scale, the timeframe and realizing we are not committing to those things but to help wrap our heads around it in terms of what we are talking about setting off.

In relationship to the innovative financing I am imagining that it is in terms of innovative financing to implement the plan but we actually need innovative financing to do the plan. These are some questions that staff could respond to.

And also, the 2011 changes, the policies that we adopted, had called for an adaptation plan and we had somewhat of a vision of how that might happen. I am wondering how this call now has changed, if you want to contrast how your thinking has evolved so that we are not in the same place five years from now of not getting any traction on it. What is different?

I am wondering if there are any similar processes that you want to emulate where somebody else has done this or began it?

Chair Wasserman replied: One, I think the result of the 2011 amendment was a very intentional punt on the implementation, including the plan, from BCDC to what was then called, the Joint Policy Committee and is now the entity called BARC.

What has emerged in the last five years is a recognition that one, some of the fears that drove that punt were not necessarily well-founded. Two, that BARC while at some level brings a different regional perspective than this entity does, did not have the fundamental resources to do that.

It was not punted back but we are working collaboratively and that is why we are talking about BCDC taking a lead in collaboration with the other entities.

On the funding piece. We have talked about the cost of expanding ART throughout the nine-Bay areas over the next three years in roughly a term of six to nine million dollars or more. We think that we are going to have a building block of somewhere close to two to three million from a combination of MTC and Caltrans and CTC money.

We have talked about developing a campaign to go out to the philanthropic and private community to match that. That is not enough. It is the basic building block and then we are going to have to expand beyond that.

Executive Director Golzband added: And you should know that staff at BCDC, the Coastal Conservancy and the Coastal Commission is working together with the resources agency to try to develop such a plan.

Chair Wasserman addressed innovative funding: When we talk about innovative funding I want to note that fundamentally means that we recognize that we do not have funding mechanisms in place. We do think there are some models in place that we can think about and no one of them is going to work.

Commissioner Pine commented: I really like the overall thrust of this objective which is really putting more focus on the adaptation versus the vulnerability. At some point people start to tire a little bit of always talking about the risks and the rising sea and want to see what the plan is, where is the implementation.

Like other members on the Commission I do think we do need to flesh out or have a better understanding and communicate clearly how this is analogous to the Regional Transportation Plan. One small suggestion would be for staff to send us some links to that.

I really want to emphasize that a very actionable and important item is this financing working group. We all know that the best plans are not going to go anywhere without funds. CHARG has an ad hoc group on financing and in San Mateo County we have a number of people thinking about that too including some people from the insurance industry, which may have a role here in financing.

Finally, on the last bullet point, getting back to the need to communicate to the public that things are actually happening. We talk about a real-time measurement dashboard. Chair Wasserman has talked about putting forward a portfolio of real projects. We are putting together an inventory in our county, which I will share with the Commission. There are more positive on-the-ground things happening than I think sometimes we give ourselves credit for.

Commissioner McGrath voiced two points: Two points. The first one on Barry's point about technical content and scientific issues; there is a place holder in here under four about content. For constructive purposes I would suggest you might want to ask Barry's group to work on a discussion of the technical issues rather than try to rework it here. I think it is pretty complex and you have a place holder.

As to recommendation one and recommendation two I appreciate your leadership Chair and the staff's work at clarifying that. It provides for planning at the appropriate scale and I like the language of both as is. I want to point out that there is one issue that we will face which is, some projects will have impacts beyond their jurisdiction which you began with.

The ability to prioritize funding gives us the ability to try to make sure that is addressed. That is, the only controversial issue in those is, when do you need to look at a more than local level? Can you do it? Is it going to increase the scope of analysis and make it more difficult to get to a project? It is all possibly implied in there. I think we should add some language later. I like the language of number one and two as is.

Commissioner Bates agreed: I also think this is the right approach. I think item one to try to develop a plan is really critical. And to form a working group to make that happen is really integral in making that occur.

I also believe that we should seriously consider taking that information and trying to craft language with one of our legislators to put it into law. So then we will actually have the power to do this.

I do not want them to do it from the top. I would like us to do our process that comes up with our ideas and how it might work. We will see local governments coming forward with their ideas of how they are going to deal with the problems. They will be bringing it to the region and the region then will be looking and seeing if it is feasible and whether it overlaps into other jurisdictions and how that might be worked out.

Ultimately if you have legislation you can also find some way to fund this. I do not want to just jump to doing legislation, don't get me wrong. I think it is best to develop it and then go forward. I think there are some people in the region who are truly environmental champions that can pick this up and run with it and make it happen.

Chair Wasserman commented: To some extent I see our focused work coming in waves. The Adapting to Rising Sea Level Working Group was the first wave which met for about 15 months and then merged into the workshops that this Commission has held.

I see the Bay Fill Working Commission which was a little different because the Rising Sea Level Group brought in experts to talk to us about various areas. I think Bay Fill is integrating them a little bit more.

I envision that we are going to move to workshops on the Bay Fill's activities. I see the financing group coming behind being the next wave. That one is going to have to involve much more active participation by outside people who have some experience about financing.

I really see these as a series of efforts building up to the tsunami that is going to save us all. (Laughter)

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Ms. Lowe continued: The second recommendation is consistent county-scale assessments. The actual language is in your staff report. Some of the possible actions that we included for your consideration: use ART as the approach, use findings from ART and other completed assessments as a starting point, combine this recommendation with the development of the Regional Adaptation Plan and develop a financing plan to complete ART in nine counties within three years.

I think it may be easier to do ART than what has been quoted. Some of the work that is underway right now makes it possible for some of the counties to get completed a little bit faster than the ones that we have lead and start with from the beginning. We may have some cost savings there.

We have about 15 minutes for this but if the Commission needs to take more time they can.

Chair Wasserman continued: We are now focusing a bit more on the vulnerability assessments and the Art Program and how this fits in. Comments are welcome.

Commissioner Sears commented: The county of Marin has completed a coastal sea level rise vulnerability assessment and we hope to have a draft of our Bayside in the Bay Wave Project; our bayside sea level rise vulnerability assessment completed in initial draft form this summer.

We have been able to do that less expensively. I say that to give the other counties and jurisdictions hope; that you can get these assessments done quite quickly. One of the key things here is having assessments that are consistent in some way to make sure that we are using the same kind of scientific analysis, the same expectations of what we are looking at for measurements so that we do come out of this local process with data that is consistent around our Bay. And I know that was the intent of saying either ART or some of our other assessments. I do think that this is an area that can be done quite quickly if there is local will and ability.

Ms. Lowe added: I did want to say one thing about the ART assessments are committed to is the working group process and working with the agencies, organizations and community members around the areas where you are working. It does take a little bit more time when you do that and it takes a little bit more money, but you get a lot more buy-in at the end. Also, the ART assessments have adaption responses, which takes longer to develop.

Commissioner Zwissler commented: When I participated in the ART workshop up in Contra Costa County one of the things I noticed was the noticeable lack of participation by local industry and the landowners, particularly in Contra Costa it was the refineries.

It came up as well when we were doing our workshops; where are the companies like Google and the others in this process? I want to re-challenge ourselves to figure out how to we engage those folks because I just worry that if we do not, we will pay the price later on.

Ms. Lowe addressed industry representation: We did have some very good representation from industry folks in Contra Costa County. Wendy was invited to the Bay Planning Coalition meeting as a guest from Tesoro Refinery. Industry people are stepping up and we are digging in deep to try and get that.

Chair Wasserman had a couple of responses: The speed and cost of assembling the ART elements is going to differ from county to county. In some ways Marin is more complex than others and in some ways it is not.

ART in the context that we are now talking is based on the vulnerability assessment but it is much more than that. If you step back for a moment to the Regional Transportation Plan context, the county-wide transportation plans come out of an assessment of transportation needs in the county but then moves to solutions. The initial ART Project in Alameda had some solutions but by no means all of them.

Some of the solutions that were touched on when it was done are being evolved and moving forward. It is significantly more than that. Those pieces will take place.

In addition, all of us have talked about the importance of being inclusive in this effort. And that inclusivity itself is an iterative process so that you may gather all of the government agencies, the cities and the counties and others in the area; but maybe you have not gotten the flood control districts there. You are going to have to engage further. Then, absolutely, we are going to have to figure out other ways to get industries involved and it is not going to be the chambers of commerce. It is going to have to get deeper into the industries so you are going to have to go to the particular industry councils and to the other groups and get them involved.

That is why the first pieces will not cost that much, the whole effort might be a different story.

Commissioner Sears added: This year we are working on our vulnerability assessment. In 2017 we will move into our adaptation planning based on that vulnerability assessment. We have about a half a million dollars to work with and we will see where we are at the end of the year.

Ms. Lowe continued: The third one Recommendation, New Institutional Arrangements. Some of the actions for your consideration are: support and promote local and regional cooperation and coordination that builds on the Regional Adaptation Plan, use the 2017 Sustainable Community Strategy or Plan Bay Area update to further policy discussions and the 2021 SCS to fully vet a regional adaptation plan, work with others to develop a regional education campaign about adapting to rising sea level aimed primarily at children and work with others to develop an approach to educate the public about sea level rise and regional assets at risk.

You will notice that we did not actually have a new intuitional arrangement proposed within this one. The intention is that we think all of these things are things that really need to happen before we even consider if a new institutional arrangement is needed.

We have given you 20 minutes but you went through the other one very quickly. You have more time on this one.

Chair Wasserman commented: There is no question that a fair number of the comments at the third workshop talked about new regional authority. We may get there. Note that, new, regional, and authority are all three separate words. It does not mean a new entity. It could just mean new authority for existing entities. We are not there yet. Attempting to go there quickly, until we have really worked out and worked on some of these building blocks, will get us into trouble, which is not to say we will not dialogue with legislators about this.

Commissioner Nelson expanded on the subject of regional authority: I am not ready to suggest what a regional authority would be if indeed we need one. It is entirely appropriate for us not to specify that here. I do want to make sure that we keep our eye on that ball as we go down this road. We want to make sure that we hold ourselves accountable and that we make a decision on that front, either we are going to use an existing institution, morph an existing collaboration or propose a formal, new institution. We need to make sure that we are making an affirmative decision on that.

I think this is implicit under three.

Commissioner McGrath commented on the verbiage: I like this one as written too because it provides the flexibility. When I started talking to people whose opinions I really respect, they all told me, regional governance is the answer. Initially I thought; that is just too hard to do from here. The last nail in the coffin on that was when Mark Stacey came here and presented information about how different the vulnerability of existing communities is.

At least in the short term that should set our priorities and we should be focusing on those things that we need to do first for the communities that are most vulnerable and most willing to take on a collaborative approach that reflects the protection of the Bay as well as the protection of the livelihoods is the way to go. That does not require a regional authority. I really like this because it is flexible and I like it the way it is written.

Vice Chair Halsted was in consensus: I agree. I think it is very good. I do think that point number two about the SCS is an important one but I am not sure how we get there. It may be by legislation I am not sure. Since it is one of the actual regional planning processes we have that is required by law it would be an important place for us to be vetting that regional adaptation plan.

Commissioner Sears addressed education: The last two bullet points of Item 3 have to do with the regional education campaign which was something that we talked about quite a bit in our Sea Level Rise Working Group. It does not get captured in the title which is really about a new institutional arrangement. It either should be separate or maybe somehow worked into the sea level rise vulnerability assessments section. I want to make sure that we do not lose track of that piece of it because it is important.

We have done a lot of outreach with Game of Floods to high school students and it has been a fantastic public education tool. I just want to make sure that we do not lose sight of it if we end up with a short list that does not explicitly reference an education campaign.

Chair Wasserman stated: I guarantee you that will not get lost. The Games of Floods is absolutely terrific. The reason that the children are on here is this is a long-term effort. The three colored recycling bins that are in most of our public spaces are there because some very smart people, 15 or 18 years ago, went out and started focusing on educating our kids who came home and said, we need to change the way we are dealing with garbage.

That is as important of a solution as dealing with the uninformed minds in Congress.

Commissioner Vasquez continued comment on education: I think this one should be called out on its own. The whole public outreach and going to the schools and having these programs is something we do with air quality and we have done it with recycling and we do it with physical activity. That is really where we need to make that generational change.

Children understand very quickly. It is us adults stuck in our old ways that find it a little more difficult to make changes. If we are talking about the future this is where it is at.

It is a whole section by itself. That way it will not get lost.

Commissioner Gilmore shared a different aspect of education: I am going to agree with all the points that were just made about the educational process. I am going to call it out as its own thing for a separate reason. I think history has taught us that with Plan Bay Area it got a lot of regional support and went through swimmingly and when you got down to the local level the locals for various reasons started to rebel. The feeling was that this was something that was forced upon us by the regional people who do not have our best interests at heart.

If you start by educating the kids who go home and educate the parents maybe you will not get that push back.

Commissioner Wagenknecht commented on existing processes: I want to speak to the idea of using processes that are already created, the Sustainable Communities Strategies; we do not need to recreate everything. It would be good for us to be involved in that type of process.

Commissioner Jahns agreed with Commissioners Gilmore and Wagenknecht: This is echoing Commissioner Gilmore and Commissioner Wagenknecht's comments. It would be helpful in addition to listing the SCS to look at other regional collaborations that exist and comparing and contrasting their authorities, how they work and looking at lessons learned so that we do not have a belief in regional planning that does not necessarily get adopted at the local level or believed in.

Commissioner Pine shared details regarding San Mateo's education program: On the education item; we did something that was really exciting in San Mateo, where we brought to a continuation high school a sea-level-rise-like curriculum and then they came to the Board of Supervisors and talked about their experience. It was really pretty exciting to see their reactions and thoughts on these issues that we have to deal with.

I like the notion of pulling out the education separately. We looked at, well, what is left?

Maybe we want to promote regional collaborations and encourage regional perspectives. Right now we are not suggesting any steps to explore these new things but clearly we want to promote collaboration and perspective. Maybe that is the direction we could capture this concept in.

Commissioner Bates had a question: I am wondering about point number two, using 2017 Sustainable Communities Strategies Update to further policy discussion in the 2021 SCS to fully vet. What does that mean, fully vet?

Ms. Lowe answered: Right now we are working very closely with the Metropolitan Transportation Commission and the Association of Bay Area Governments to develop resilience content for the update to the 2017 Plan Bay Area. However, resilience is not incorporated into the scenarios.

The scenarios were run and they are the growth scenarios that reduce the greenhouse gas emissions that are intended to reduce vehicle miles travelled, greenhouse gas emissions, link housing to transportation. There are three scenarios.

One of the scenarios is a very dense scenario, one is a less-dense, more neighborhood focused scenario or a corridor-focused scenario and then the other is a dispersed suburban scenario.

Just like the last Plan Bay Area they selected the one in the middle, which is the corridor scenario that focused on transportation and housing linkages but does not grow our cores in a very intensely dense way.

These scenarios were developed without resilience issues, such as rising seal levels incorporated at that point when the scenarios were developed.

Vice Chair Halsted commented: MTC and ABAG has ranked all of these scenarios based on a number of criteria selected by the Commission. Sea level rise was not among those or adaptation to sea level rise. There was something about climate change but nothing more than that.

It was a shortcoming of our selection of criteria. It needs to be improved in the future.

Commissioner Pine voiced a concern: My concern is that if you are going to have a sustainable community strategy you are going to have to have transportation. You are going to have to protect these various entities and these various cities and counties. They are going to have to project how they are going to do that particularly when you get to 2021.

If we actually pursue this as a strategy it could be great because it ends up making us do the planning and think about how we are going to sustain it; how are we going to prevent, where are we going to withdraw, where are we going to build up, all of the things we have been discussing.

Ms. Lowe spoke: I think that Commissioner Bates said it very well. I will say that there is an interest in including seal level rise in this 2017 Update although it is a limited update. MTC and ABAG have said this over and over again. There is an interest in including an implementation/adaptation strategy that could be for one of the bridges. We are focused right

now on the San Mateo Bridge and some strategies we identified in our partnership with MTC and Caltrans on identifying something that could go into the SCS to fund an adaptation strategy.

It would give us a model of having those kinds of implementation measures in the actual Plan Bay Area.

Vice Chair Halsted returned to the education point: I would like to go back to the point about education and I think that all of the communities in the Bay Area will accept this better if the children in their households are telling them this is what they need to do. (Laughter)

Ms. Lowe continued to the next point: The fourth recommendation, prioritize physical interventions. Please refer to your staff report for the specific language. The possible actions are: identify the types of adaptation approaches that are likely to be successful and scalable, help build Bay-Area-wide consensus to beneficially reuse dredged material, establish an Adaptation Review Board with expertise in innovative green shoreline solutions, and support the state Coastal Conservancy in initiating a green shoreline initiative to help us implement the Baylands goals habitat update.

Commissioner McGrath expressed concern on bullet three: I have heartburn over bullet three. I am paying attention to some of the technical details. I have a concern about defining what the review mechanism is that is something analogous to our Design Review Board or Engineering Board. I am concerned about what goes into that.

The short list of technical issues of concern that we need to attend to in some way; first, what is the appropriate scale of the adaptation plan area? If a local government comes in with too small of an area and there is potential regional impacts, what do you do?

Second, you need a technical platform. There are models that tell us, this is how technically we can review vulnerability and projects.

Who is going to be satisfied analytically? There are three permit processes; there is BCDC's, there is the Regional Board and there is the Corps of Engineers. You somehow have to bring those into alignment.

And then of course there is local government. There needs to be a process for continuous learning. We are doing a lot of resilience work on streams. We are doing restoration work on wetlands which are making us more resilient. We need to be continuously learning from that. We also need to update the sea level rise projections in an appropriate level of time and make sure that they are also endorsed by the state.

We also need to make sure the federal agencies are brought into this process not just for the possibility of eventually permitting these things but in terms of the economic drivers, unless we are doing something that FEMA will buy into and that will eventually pay off for local tax rates, we are giving up a significant economic driver.

There are various ways of dealing with this as a Commission. I could recommend an amendment to that if you want to try to do it all today. We need to be able to have a little more definition about what the technical review is going to look like.

Chair Wasserman replied: I am not sure what your thoughts are on amendment but let me respond first. This third bullet, I agree, needs a fair amount more focus on it. At some level I see it as a parallel to our taking the leadership role in the overall effort because there are multiple agencies and at some level you would have to include the localities for particular projects looking at specific adaptation mechanisms or suggestions. Centralizing that to some extent has some real value.

I am not sure it is limited to green ones. As we think of hardscape adaptation most of us think about sea walls, embankments, rip-rap embankments but hardscape adaptation is also the building that has a floodable first floor. If we think about a place where those can be brought together; evaluated so in one location you are combining the expertise, I think there is some real value.

Commissioner Randolph commented on bullet three: I think we should be careful about the context in talking about an adaptation review board. We need to be clear that it is not an additional layer of decision making. So what is the authority? If it is intended to be like our Design Review Board and be an advisory resource, we may want to make that clearer.

Chair Wasserman responded: It would not be an additional layer of decision making. The parallel is to the Design Review Board.

Commissioner Pemberton had questions on number four: I want to get a sense of what the threshold would be for determining when looking at the natural and other assets from flooding; how would you determine significant? Or how would we determine significant?

What sort of physical interventions would be on the table?

If this moves forward would that require a CEQA process or environmental impact reports for the physical interventions?

One last minor suggestion, I recommend rather than saying, manmade, we say, artificial, or human-made to be gender neutral.

Commissioner Sears commented on number three: If we had an adaptation advisory committee it might diffuse some of the concerns about decision making authority. Section four is my favorite section. I love the reference to ongoing pilot projects.

On the second bullet point on the beneficial reuse of dredged materials; this is something I would really like to see us push forward as fast as we can. We have a couple of projects in Marin where we want to do that and we are working with staff to make that happen. It is very important for a local jurisdiction in creating those pilot project opportunities.

Chair Wasserman commented: It is important for all of us to recognize that there are elements in here that need to be in here because we are trying to do this comprehensively. At the same time some of these elements are being worked on independently and certainly the beneficial reuse issue we are working on independently in a whole range of ways.

Commissioner Jahns commented: We definitely have to have a better understanding of what, significant, means before going forward. We also need to understand how there might be consideration of, significant, in natural systems or ecosystems as well as the built environment.

It is good to see these options for nature-based adaptation and green infrastructure on here. I would not want to see those as being seen as sufficient for protecting existing assets.

Chair Wasserman continued: The first bullet point here has a number of challenges but also great importance. We have talked and heard from Christina Hill and her project. I hope that by the time we adopt this we will be able to look at a parallel piece that really has 10 or a dozen case studies that her team is working on of ways to adapt. Those become very important to guide our overall efforts and are a critical part of our storytelling.

Commissioner Zwissler commented on a false dichotomy: I picked up this concept of a false dichotomy a couple of workshops ago. This is a false dichotomy between a natural solution or a gray versus green and how gray solutions can be interesting, attractive and exciting and wonderful. They do not have to be concrete, negative and bad; and green only being green and wonderful. We need to make sure to think about this as we go forward.

Commissioner McElhinney stated: At this point in the program I would like to make a statement as a member of the Rising Sea Level Commissioner Working Group. I am quite impressed. The policy development and progress we have had over the last couple of years has certainly been enhanced by these workshops. It is really commendable to see the staff pulling this all together today.

The workshops were attended by the partner agencies and numerous stakeholders. I wanted to give my thanks to all those agencies and stakeholders leading up to this fourth workshop. It has really helped educate all of us.

If we can take that out on the educational program, similar workshops, that is a great idea. It will continue to help us evaluate these policies and practices for regional action and leadership moving ahead.

This particular item has a lot of other levels. I wanted to mention that there is a lot more work to be done.

Commissioner McGrath had a suggestion: I have some language. I do not want to create a mechanism for a new level of review. What I want to do is to make sure that there is guidance for people to get through the process and get to, "yes". I am a little troubled by jumping right away to an answer. I would suggest that we establish a process to provide the necessary expertise.

I have some language that I would like to give to staff and let them talk it over with interested parties and work on it so that we do not immediately go to something that is highly defined. I think the intent of the Commission is to establish guidance rather than another regulatory review process and we can work on that language if that is acceptable to the Chair and the staff. That is the best way to handle this so we have a placeholder in here and we know that it needs some work but I think the intent is clear enough.

Commissioner Jahns had a question: The phrasing on this is kind of defensive, for example physical interventions to reliably protect. Some of the things you were describing like adaptable first floors and things like that are more designing with sea level rise in mind. Is the intent here to design protection or to identify physical solutions to adapting to rising sea levels?

This recommendation is here, that forces action and I like that. The rest are about planning and coming together and making decisions and this forces the fact that we have to do something at some point. I am wondering on intent there.

Chair Wasserman replied: This is one where uncharacteristically I am going to punt slightly. Given the comments, the title of four actually needs a fair amount of work itself; not total reworking, but addressing some of your points and some of the other points that have been made.

Clearly our efforts need to be aimed at protecting what does exist, built or natural, as well as looking forward to what will be built in the future and what natural changes will occur in the future. That is one of those adjustments.

You are also right that this is one where it comes much closer to specific actions. This will take some careful wordsmithing.

Commissioner Jahns had an additional suggestion: I would like to suggest that in terms of the regionally significant assets; the regional adaptation plan would be the process through which those regionally significant assets would be identified. It is not significant impacts on those assets. It is actually that those assets themselves have been identified; such as Oakland International Airport is a regionally significant asset. Some of our natural marshes are regionally significant assets.

You cannot really look at this one from the perspective of somebody who has been struggling with these with some of the members of the staff without looking at the work that will be going on in recommendation one and recommendation two as well. I would like to suggest that.

Ms. Lowe continued on to recommendation five: We changed the language on this one a little bit to be a little clearer. We changed the reference from regulations to change existing laws and policies.

Some of the possible actions: complete Policies For a Rising Bay which analyzes fill policies in light of rising sea level, change BCDC's permit application to require information on the potential impacts on adjoining properties, develop a comprehensive multi-agency permit process for projects that place fill in the Bay to increase resilience, and discuss amending the McAteer-Petris Act, Bay Plan and BCDC regulations to change the definition and use of fill.

Commissioner Randolph discussed bullet number two: I had a little discomfort or uncertainty on bullet number two. Maybe it is just the way it is phrased. My reaction was, well, "is the topic of the potential impacts of a project on adjoining properties so important to stand out of one of our four bullets?"

The concern behind that is that one could read as suggesting that somebody proposing a project could be held responsible for mitigation and protection well beyond the bounds of their project. I am not sure that is where we wanted to necessarily go if only because that implies a lot of other cost factors for developers.

Is not the question really about the context? That from a BCDC planning stand point; when you look at an individual project since we are going to be in a comprehensive planning exercise that should be looked at in the context of the Bay shore resilience in that part of the Bay Area in general. That is where I would want to focus it more than just requiring information on how other areas might be affected.

Commissioner Nelson commented: It seems to me that what we want to make sure we are avoiding is the suggestions that we are creating a new permit requirement or a new mitigation requirement. We are not doing that. The reason this language is appropriate and valuable is that we want to encourage and inform adaptation planning.

The Bay Area Council's letter asked for some clarification there. I think that is entirely appropriate. We want to be very careful about anything that looks as though it may be a backdoor decision about regulatory requirements and we have not made such a decision. Nevertheless, getting that kind of information from applicants could be enormously valuable because that is going to be a data source for us to learn from and it is going to build a network of more and more applicants who recognize that the paradigm which we have had now for 50 years of doing our work almost exclusively on a project-by-project basis, that somehow is going to have to evolve over time.

One other comment on recommendation five is that I will be talking with the staff and Chair afterwards about how our Bay Fill Working Group will change in terms of responding to the Commission's direction.

Commissioner Gilmore played devil's advocate: I agree with my two colleagues but I cannot help but play the devil's advocate here. If we are going to stick to our project-by-project views that we have done for decades and we are not requiring another level of regulation, to tee off what one of the public speakers said earlier, if somebody comes along with a project in an area that we know is going to be inundated within a relatively short period of time; what about saying, no?

How do we balance those two? I do not expect an answer but it is something that we are going to have to grapple with as we move all of this forward.

Commissioner Bates had a CEQA question: How does CEQA enter into this? If you are building a project like this don't you have to look at those ramifications for adjacent properties?

Deputy Attorney General Chris Tiedemann answered: It really is a project-by-project analysis and if there are adverse impacts on the adjacent environment, yes, you do have to look at those impacts.

Commissioner Bates inquired further: Is that sufficient?

Commissioner Pemberton had a question: Would the applicant just use that information if they have already provided it in the CEQA analysis?

Commissioner Zwissler commented: It may not actually be an adverse impact that we are thinking about or looking at. Back to our previous example of permitting islands, access and other issues, that are relevant to the approval of the project. So it is not just negative effects but also the long-term viability and sustainability and resilience of the projects that we are nominally approving.

Commissioner Gilmore commented on CEQA: So getting back to CEQA, how specifically does CEQA look at sea level rise? There are impacts on the project or impacts on the neighboring properties that may or may not have anything to do with sea level rise and that is kind of the context for our discussion here. I am not sure that CEQA really answers the question about sea level rise.

Commissioner McGrath commented on this issue: This is the really. I had the same reaction that Sean did. This comes from a regulatory perspective. It is reactive rather than suggestive or leadership oriented.

On the CEQA question what we know is that if you armor a whole lot of the South Bay you will have impacts on the North Bay. And where do you draw the line on what is cumulative impact?

I do not think it is appropriate to break everything down to such a small piece. I think it is appropriate to say you have to look at this. I do not think this provides a leadership or guidance. What I was thinking about was something that goes in the other direction that says, we want an easy path and a hard path. And this incorporates what I heard from a lot of people, we want the path for resilience that is good for the habitat to be easy. We want it to be technically sound.

I was playing around with language that resilience planning and mitigation at an appropriate regional scale which leaves judgement, is favored and will be a priority for grant funding.

That says, do it at the right regional scale and implementation of this involves work to create an accelerated permit and planning process for such projects by considering issuing a master permit or establishing a work group similar to the LTMS Management Committee.

I did have a discussion with the current acting regional administrator of EPA about pulling the federal agencies into the process so you can work a little more collaboratively at things that we would like to see and try to make the path simpler for them.

Preamble to that effect needs to go in before you say, "we won't accept a permit unless it has got some regional analysis." You want to have a carrot, not just a stick.

My language may not be perfect but the idea that we can do things collaboratively that are beneficial and we are going to try to work to make that process simpler and get the federal agencies into it so you actually get to, yes; because that has been my concern as I watched the last six months of projects kind of struggle through that.

Chair Wasserman commented: The issue of a project's effect on the environment and the effect of the environment on the project is a matter is much debated in the CEQA context. I would suggest that the status today is that there is not a basis under CEQA to consider the effect of the environment on the project.

What we are addressing is the middle ground. When you put something in the middle to protect your project from the expected changes in the environment and it has an effect on surrounding properties, what does that mean?

I think this bullet in particular is one that does need to have some careful discussion at a staff level and a legal level and that will go on before it comes back to us.

Commissioner Nelson's articulation of why we want to think about asking these questions however we might phrase it and whatever preamble or additions we might put on it is exactly why we have to start thinking about this in some fashion and we cannot continue allowing islands to develop.

There is no intention to make this a regulation. We have neither the power nor the consensus or desire to seek the power at the present time to require mitigation on adjacent properties.

At the same time, if we do not start asking about it, gathering information about it, we are burying our heads in the sand.

Commissioner Vasquez had questions: Couldn't that be some of the responsibility of the advisory group that is going to be giving some guidance? That they could look at some of that, those impacts?

Chair Wasserman answered: Sure. And I think that is part of the dialogue that will go on. But at some level, we do want to be careful and transparent as possible where the costs are borne because if you put it purely on a new advisory group that we create then the costs are all on our side. If you put it on the applicant then most of the cost is theirs.

It is some of those balances that we need to look at.

Commissioner Vasquez added: We do not have a FEMA map for sea level rise. That is part of the problem. The local entities that are permitting projects look for that, where the potential flooding could occur because it is based on historical flooding. Nobody really knows where inundation is going to occur with sea level rise. It is a tough spot to be in.

Chair Wasserman continued: I now want to come back to what I said we would not lose sight of. Barry you want to talk about how you might articulate adding a piece about the data centralization.

Commissioner Nelson replied: It is important to note that there is a difference between a data repository and most of the other items we are talking about today. Most of the other items we are talking about our assumption is that BCDC is going to be a central and leading role.

A number of folks have commented about the value of data particularly of centralized data repositories particularly to adaptation planning and vulnerability analysis. It touches on a number of the other bullets.

It makes sense to think about data as a separate item in this list for two reasons. First, it informs those other five actions. But also because BCDC has a different role whereas in number one we are talking about BCDC playing a central role in adaptation planning. I do not assume that BCDC has a central role in data gathering in a data repository. Part of playing a leadership role on a regional level is recognizing that we can be a catalyst and should be a catalyst even on items where we are not in the lead.

I was playing around with a little language. I will just ask the Chair about his thoughts about whether you expect we are act today.

Chair Wasserman replied: On this one if you have language I will entertain it.

Commissioner Nelson continued: Okay. I am going to throw a couple of extra words in the language that is in the staff summary of the workshops to make it clear that it is not my intention for BCDC to become that repository or become solely responsible for creating it.

So the language is a variation on the bullet at the bottom of page five in your staff report. It is just adding a few qualifiers to make it clear that we are not at the center of this. And it is, number five would read, assist in an effort to identify and fund and then pick up that language.

Executive Director Golzband asked: And then you would have that be ultimately number six at the end here, correct?

Commissioner Nelson replied: Yes.

Commissioner McGrath added: I will second that as an amendment.

Chair Wasserman replied: We are not going to take motions on amendments. I am going to deal with these as favorable amendments and propose some very mushy language on a motion. (Laughter)

Commissioner Randolph spoke: I was going to support Barry's suggestion. This came up at our table at the last workshop and there was consensus around it that wherever this repository of data would exist it should be an organization that is not in a regulatory capacity and not in an advocacy role. People will always debate the data especially around climate. Wherever it lives should be someplace that is independent and has credibility and is accessible to a lot of different people.

Commissioner McGrath had added to the point: When the Coastal Act was passed we had two data sources to look at the coast. We had an oblique slide and an overhead slide. (Laughter) Along the way we developed an aerial over-flight. The world is so much richer with data now.

To this point, what is really interesting is after the 1983 storms we did not collect the data on what flooded or how deeply. Now with drones and things like that people are overflying at high tides. All of this information is analytically rich.

This is not only really valuable it is a logical place and it provides the mechanism for us to be analytically robust at lower costs. It is a great idea.

Ms. Lowe added: I would like to agree with all the Commissioners that have raised this issue as a significant issue that should go forward. The ART team has collected a significant amount of data and we need to use a lot of data. We analyze that data and we make maps out of that data. If we could find somewhere else to put it our GIS analyst would greatly appreciate that and so would the rest of the region. It is really a challenge for us right now.

Chair Wasserman continued: I would ask someone to make a motion along the following lines. That the recommendations that we have considered with the specific additions of a separate item for the educational efforts and a new separate item for a central data repository be endorsed in concept and staff be directed to bring a plan back to us incorporating the comments and suggestions as quickly as possible.

MOTION: Vice Chair Halsted moved as per Chair Wasserman's statement, seconded by Commissioner Nelson.

Commissioner Zwissler commented: That is a lot of stuff. Are we waiting for a giant plan in two years?

Chair Wasserman answered: No, no, no. What I envision by this motion that Vice Chair Halsted kindly made is to bring this back to us in essentially this form with the clarifications, additions and manipulations that we have discussed here. I would expect that to come back to us quite quickly. That will then lead to a plan. But, no, no, this is something that will come back to us so that we will have it and we can put it out there. It will be incorporated in our update to our strategic plan which will probably happen sometime this summer.

Vice Chair Halsted added: Which raises the interesting question, should we suggest the staff include some timelines?

Chair Wasserman replied: I think that is a good idea. At least some timelines of where we take this and how it fits in. I will accept that as a friendly amendment if the seconder will accept it.

VOTE: The motion carried with a roll call vote of 15-0-0 with Commissioners Addiego, Bates, Gilmore, DeLaRosa, Pemberton, McGrath, Nelson, Randolph, McElhinney, Sears, Vasquez, Ziegler and Zwissler, Vice Chair Halsted and Chair Wasserman voting, "YES", no "NO", votes and no abstentions.

10. Adjournment. Upon motion by Vice Chair Halsted, seconded by Commissioner Nelson, the Commission meeting was adjourned at 3:33 p.m.

Respectfully submitted,

STEVE GOLDBECK Chief Deputy Director

Approved with no corrections, at the San Francisco Bay Conservation and Development Commission Meeting of June 16, 2016

R. ZACHARY WASSERMAN, Chair